<u>Remarks</u>

The above Amendments and these Remarks are in reply to the Office action mailed May 8,

2001.

Objection to Abstract

The abstract has been objected to as containing informalities. An amended ABSTRACT is

submitted herewith and it is respectfully submitted that the objection to the Abstract is now mute.

Objection to Specification

The specification is further objected to because it contains two different descriptions of

Figure 1. An amendment to the Brief Description of Figure 1 is submitted herewith and it is

respectfully submitted that the objection to the Specification is now mute.

Objection to Claims 23-26

Claims 23-26 are objected to because of containing informalities. The typographical errors in

line of 3 of claim 23 have been corrected and it is therefore respectfully requested that the objection

to these claims be withdrawn.

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Rejection of Claims 1-22, 27 and 30 Under 35 U.S.C. §112

Claims 1-22, 27 and 30 are rejected under 35 U.S.C. §112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

Claims 1, 10, 18, 27 and 30 have been amended and it is respectfully submitted that Claims

1-4, 6-15, 17-22, 27 and 30 are now sufficiently definite under 35 U.S.C. §112, second paragraph.

Rejection of Claims 1, 2, 10, 11, 13, 18-21 and 23-26 Under 35 U.S.C. §102(e)

It is respectfully submitted that Claims 1, 2, 10, 11, 13, 18-21 and 23-26, as amended, are not

anticipated under 35 U.S.C. §102(e) by U.S. Patent No. 5,884,033 to Duvall et al. ("Duvall").

Claims 1-2

It is respectfully submitted that *Duvall* fails to disclose each and every aspect of the invention

defined in Claim 1 and in particular:

a plurality of digital content ID generators provided on a plurality of devices;

an ID appearance database coupled to receive digital content IDs from the

digital content ID generators; and

a characteristic comparison routine identifying the file content as having a

characteristic based on the appearance of the digital content ID in the appearance database

It is well settled that "A rejection for anticipation under section 102 requires that each and

every limitation of the claimed invention be disclosed in a single prior art reference." In re Paulsen,

30 F.3d 1475, 31 USPQ2d 1671 (Fed. Cir. 1994).

Duvall fails to disclose the claimed "... plurality of digital content ID generators...".

According to the Examiner, with respect to claim 1 as it appeared prior to the instant amendment,

"the claimed digital ID generator and ID appearance database are met when Duvall shows that the

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system stores filtering information in a database. Clearly the filtering information has to be

generated by an ID generator..."

As this rejection is best understood, the Examiner seems to assert that the filter is a digital ID

and this filter is generated by a filtering system and stored in its filter database. However, Duvall

never discloses any such inferred digital ID generator. In fact, Duvall simply uses content filtering;

there is no equivalent of a "digital content ID" nor a "digital content ID generator", much less any

generators "provided on a plurality of devices" as defined in Claim 1. It is respectfully submitted

that the Examiner cannot use a single, inferred teaching from the reference to anticipate multiple

features in a claimed limitation of the invention.

Moreover, nothing in Duvall teaches that a plurality of generators provided on a plurality of

devices in cooperation with "...an ID appearance database coupled to receive digital content IDs

from the digital content ID generators..." It is noted that in the Office Action, in rejecting previously

defined claim 5, calling for a plurality of ID generators, the Examiner noted that "it would have been

obvious to one of ordinary skill in the art to include [generators] in order to integrate different

systems available on the Internet."

However, this conclusory statement is without support in the cited references. In accordance

with MPEP §2144.03, applicant respectfully traverses the inference made by the Examiner that

generators as apparently described by the Examiner are present or understood in Duvall. As noted

therein:

"if the applicant traverses such an assertion the examiner should cite a reference in

support of his or her position."

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It is respectfully submitted that no disclosure of a database meeting this limitation is present

in Duvall, nor can one be properly inferred therefrom. If such rejection is maintained,

citation of such a reference disclosing this teaching is specifically requested.

Duvall clearly teaches a client filtering system in which filtering is performed at the client

level based on input provided by a server. The only Hash involved is in the identification of the

serial number of the client to specifically identify the client. (See col. 7, lines 40 - 53.)

Finally, Duvall does not teach:

a characteristic comparison routine identifying the file content as having a

characteristic based on the appearance of the digital content ID in the appearance

database

There is no teaching of a "...routine ... identifying content ... based on the appearance of the

digital content ID..." The section of Duvall cited by the Examiner does not support the assertion that

digital content ID's are compared to other ID's rather than content. This section states that: Duvall

compares "certain information in portions of the message and the filtering information." Col 1, lines

37 – 38. This is not "... identifying... based on the appearance of the digital content ID in the ...

database."

It is respectfully submitted that claim 11 is not anticipated by Duvall. It is respectfully

submitted that claim 2, being dependent from claim 1, is also not anticipated by Duvall.

CLAIMS 10, 11, 13

It is respectfully submitted that claim 10, and claims 11 and 13 dependent from claim 10, are not

anticipated by Duvall.

receiving digital content identifiers for the data files from a plurality of

source systems all coupled to a network;

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determining, on a processing system coupled to the network, whether the forwarded identifier matches a characteristic of other identifiers; and outputting, to at least one of the plurality of source systems responsive to a request from said source system, an indication of the chrematistic of the data file based on said step of determining.

Initially, it is submitted that the claimed step of "...receiving digital content identifiers for the data files from a plurality of source systems all coupled to a network..." is not taught by *Duvall*. The Examiner states, with respect to claim 10, that *Duvall* discloses "a method for identifying a characteristic of a data file". In addition, the Examiner states that: "the claimed generating a digital identifier for the data file, forwarding the identifier to a processing system and determining whether the forwarded identifier match is a characteristics [sic] of other identifiers are met with *Duvall* shows the system compares portions of incoming or outgoing message is filtering information." (Paragraph 4 of the Office Action).

With the statement, it appears that the Examiner equates the *content* of the data file with the *digital content identifier* of the data file. (In earlier rejections, the Examiner equates *Duvall*'s filters with the digital content identifier.) In any event, *Duvall* clearly filters strings based on content. Filters in *Duvall* are content filters; they are not related to the message, but are strings for allowing or blocking based on pattern matching with the content. (Col. 6, lines 20-34). As noted above, in order for a reference to anticipate a claimed invention, the reference must anticipate each and every element of the invention.

Moreover, *Duvall* does not teach step of "receiving ... from a plurality of source systems coupled to a network". As noted above with respect to claim 1, *Duvall* filters the message at the client or server entirely. (See, Col. 3, lines 42-47, Col. 8, lines 18-27). While *Duvall* receives content files, it receives neither "filters" nor anything interpretable as a "digital content ID" from any "plurality" of systems.

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Still further, *Duvall* does not teach the step of "outputting" as currently defined in claim 10. The only "outputting" that the system described in *Duvall* is that updating filtering information. The output of this update is of all the filtering information, not a "characteristic of a specific data file" as defined in claim 10. Moreover, such outputting is not "responsive to a request from said source system", as defined in claim 10.

Hence, it is respectfully submitted that the invention as defined in claim 10, and claims 11 and 13, dependent from claim 10, is not anticipated by *Duvall*.

CLAIMS 18 - 21

Is respectfully submitted that the invention as defined in claim 18, and claims 19-21 dependant from claim 18, is not anticipated by *Duvall*.

Initially, it is noted that *Duvall* does not disclose:

receiving a digital content identifier unique to the message content from at least two of a plurality of devices;

In *Duvall*, the content itself is filtered. Filtering is based on the content and pattern matching, not comparison of digital content identifiers.

Moreover Duvall does not perform a step of:

comparing the digital identifier to a characteristic database of digital identifiers received from said plurality of devices to determine whether the message has a characteristic;

Duvall teaches a system which filters directly based on content, not an identifier of the content.

Finally, Duvall does not teach a system including a step of

responding to a query from at least one of said plurality of devices of the existence or absence of said characteristic of the message based on said comparing. In Duvall, a blanket update is performed. While the update may be responsive to a client agent requesting an update from an update server, the response is not a response to "... a query ... of the existence or absence of said characteristic of the message..." but is rather a filter list update. Duvall teaches updating all filters in the database so that the client agents can perform filtering themselves (Col. 7 lines 15-45).

Hence it is respectfully submitted that claim 18, and claims 19 – 21 dependent from claim 18 are not anticipated by *Duvall*.

Rejection of Claims 27-30 Under 35 U.S.C. §102(e)

It is respectfully Claims 27-30 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,052,709 to Paul ("Paul").

Paul does not disclose each and every feature of the claimed invention. In particular, Paul does not disclose:

a client agent file content identifier generator on the first computer, the file content identifier comprising a checksum of at least two non-contiguous sections of data in a file:

Paul discloses a system wherein a "SPAM probe" email address is used to collect SPAM emails, and wherein a filtering system based on the content of such emails, including among other portions of the content, an IP address, is used to filter the email. Paul does not disclose a "...content identifier generator... comprising a checksum..." The system in Paul simply looks at portions of the content and flags certain portions of the content as comprising SPAM email. (See, For Example, Figure 7 and Col. 10 lines 1-3.)

Moreover, Paul does not disclose:

a server comparison agent and data-structure on the second computer receiving identifiers from the client agent and providing replies to the client agent;

In *Paul*, processing is performed using the filters entirely on the client or the server. In addition, the server provides broadcast alerts to clients rather than "replies to the client agent", as defined in claim 27. (See Col. 10 lines 18 – 26).

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Hence it is respectfully submitted that claim 27 is not anticipated by Paul.

It is further respectfully submitted that claim 28 is not anticipated by *Paul*. *Paul* does not disclose:

collecting data from a plurality of systems having a client agent generating digital content identifiers for each of a plurality of files on the Internet to a server having a database;

As noted above, *Paul* does not collect digital identifiers but merely email content, and generates alerts based on portions of the content. Hence, there is no teaching of "collecting" data from "systems having a client agent generating digital identifiers". No such "client agent generating digital content identifiers" is presented. The system in *Paul* merely collects emails addressed to a particular SPAM probe email address.

Moreover Paul does not teach:

characterizing the files based on said digital content identifiers received relative to other digital content identifiers collected in the database;

Again, it is noted that as *Paul* does not teach "digital content identifiers" in accordance with the present invention, it cannot teach characterizing them in accordance with such digital content identifiers. Even so, *Paul* does not teach characterizing "relative to other digital content identifiers." In *Paul*, the system identifies SPAM based on the fact that it was sent to the SPAM probe address; it does not compare addresses or other portions of the content to determine the nature of the email.

Hence, it is respectfully submitted that the invention as defined in claim 28 is not anticipated by *Paul*. It is further respectfully submitted that the invention defined in claims 29 and 30 is also not anticipated by *Paul* as the invention defined therein includes all the limitations of claim 28.

Rejection of Claims 3 and 12 Under 35 U.S.C. §103(a)

It is respectfully Claims 3 and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable

over Duvall, in view of U.S. Patent No. 6,094,487 to Butler et al. ("Butler").

Neither Duvall nor Butler, alone or in combination, teach a system wherein a "digital content

identifier" is provided by hashing, nor any identifier that is provided by using the MD5 hash. The

Examiner notes that the MD5 hash is a commercially available hash and "it would have been obvious

... to include the MD5 hashing algorithm while implementing the system of Duvall in order to

benefit from the readily available software on the market.". However, the Examiner has provided no

teaching as to why one of average skill in the art would be motivated to use any hashing concept in

conjunction with the teachings of Duvall at all. Hence, the Examiner has failed to provide a prima

facie rejection based on 35 U.S.C. §103. Moreover, in Duvall, the hashing concept is utilized solely

for identifying a agent to the update server. Even if one of average skill were to look to Duvall for

any teachings with respect to hashing, such teachings relate only to identifying a client to an update

server.

It is therefore respectfully submitted that the invention as defined in Claims 3 and 12 is not

obvious over Duvall in view of Butler.

Rejection of Claims 5-8, and 17 Under 35 U.S.C. §103(a)

It is respectfully submitted that Claims 6-8, and 17 are not obvious under 35 U.S.C. §103(a)

as being unpatentable over *Duvall*. (Claim 5 and 16 are cancelled.)

With respect to claims 6-8 and 17, it is respectfully submitted to the Examiner has failed to

provide a prima facie rejection under 35 U.S.C. §103. In particular, Examiner has taken official

notice that the communication network comprises public and private networks. As noted above,

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MPEP§2144 specifically requires that, where the Examiner has asserted certain teachings to be well

known to one of ordinary skill in the art and the applicant traverses this assertion, the Examiner is

required to provide a reference when a references is so requested The Examiner's assertion is

respectfully traversed. In addition, the Examiner has provided only a summarily stated rejection that

"it would have been obvious" without specifying what would motivate one of average skill in the art

to couple a plurality of digital IP generators, which are not taught by Duvall, across a combination of

public and private networks. Thus, no prima facie rejection under 35 U.S.C. §103 is present.

Hence, it is respectfully submitted that the invention as defined in claims 6-8 and 17 is not

obvious over Duvall.

Rejection of Claims 4, 9, 14, 15 and 22 Under 35 U.S.C. §103(a)

Claims 4, 9, 14, 15 and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over

Duvall, in view of U.S. Patent No. 5,199,102 to Cobb ("Cobb").

With respect to claims 4 and 9, it is once again noted that Duvall fails to teach the use of

digital content ID's in the context of the language of the claimed invention, and that comparison of

content to a string is the only teaching Duvall mentions. In the rejection of claim 4, the Examiner

equates filtering mass emailing with comparing the frequency of digital IDS in a database. There is

no such teaching in Duvall nor is any such teaching suggested. Duvall merely requires filtering

based on content. The frequency of the content, even were such content equated with the "digital

identifier" of the claimed invention, is not anywhere taught or suggested as being relevant in Duvall.

With respect to claim 14 and 15, it is respectfully submitted that Duvall alone or in

combination with Cobb fails to teach a method as defined in claim 10 from which claims 14 and 15

depend, for detecting SPAM emails.

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With respect to claim 22, it is respectfully submitted that *Duvall* alone or in combination with

Cobb fails to teach a method of identifying Ids based on frequency, as stated above with respect to

claims 4 and 9, and in particular with respect to frequency over time. The mass mailing teachings

of Cobb do not teach one of average skill in the art to filter using the method of claim 18, in

conjunction with a frequency test of digital Ids to filter an email message.

Hence it is respectfully submitted that claims 4, 9, 14, 15 and 22 are not obvious over the

cited prior art.

Rejection of Claim 31 Under 35 U.S.C. §103(a)

Claim 31 is rejected under 35 U.S.C. §103(a) as being unpatentable over Paul in view of

Cobb.

Claim 31 depends from claim 28, and includes all the limitations of claim 28. In Paul, the

system filters based on content, which includes portions of the content like IP addresses. There is no

teaching in Paul of filtering the content based on frequency. Paul looks to whether the content is

sent to a particular SPAM probe email address. Again, there is no teaching in Cobb which would

motivate one of average skill in the art to provide separate digital IDS and then filter those IDS based

on the frequency of their appearance.

Hence, it is respectfully submitted that claim 31 is not obvious over Paul.

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Based on the above amendments and these remarks, reconsideration of Claims 1-4, 6-15, and

17-31 is requested.

The Examiner's prompt attention to this matter is greatly appreciated. Should further

questions remain, the Examiner is invited to contact the undersigned attorney by telephone.

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Enclosed is a PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. § 1.136 for extending the time to respond up to and including today, August 8, 2001.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 501826 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

Date: August 8, 2001

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